

STATE PLAN UNDER TITLE XIX OF THE SOCIAL SECURITY ACT

State of VIRGINIA

12 VAC 30-90-300

§1.1. Effective October 1, 1990, the Virginia Medicaid Program reimbursement system for nursing facilities is the Patient Intensity Rating System.

§1.2. Patient Intensity Rating System (PIRS).

- A. PIRS is a patient-based reimbursement system which links a facility's per diem rate to the level of services required by its patient mix. This methodology uses classes that group patients together based on similar functional characteristics and service needs.
- B. PIRS recognizes four classes of patients:
1. Class A - Routine I: Patients are classified by their functioning status. Routine I classification includes care for patients with a 0 to 6 Activity of Daily Living (ADL) impairment score.
 2. Class B - Routine II: Patients are classified by their functioning status. Routine II classification includes care for patients with moderate or greater ADL impairment. A moderate or greater ADL score ranges from 7 to 12.
 3. Class C - Heavy Care: Patients are classified by their high impairment score on functioning status and the need for specialized nursing care. These patients have an ADL impairment score of 9 or more and one or more of the following:
 - Wound/lesions requiring daily care;
 - Nutritional deficiencies leading to specialized feeding;
 - Paralysis or paresis, and benefiting from rehabilitation; or
 - Quadriplegia/paresis, bilateral hemiplegia/paresis, multiple sclerosis.
 4. Specialized Care: This class includes patients who have needs that are so intensive or non-traditional that they cannot be adequately captured by a patient intensity rating system, e.g., ventilator dependent or AIDS patients. Specialized Care reimbursement shall be determined according to the methodology set forth in the Nursing Home Payment System §17 (12 VAC 30-90-264).
- C. Patients in each class require similar intensities of nursing and other skilled services. Across classes, however, service intensities are quite different. Since treatment cost depends on overall service need, the patient class system has a direct correlation to nursing and therapy costs.

TN No. 97-21
Supersedes
TN No. 90-08

Approval Date

Effective Date 12-01-97

STATE PLAN UNDER TITLE XIX OF THE SOCIAL SECURITY ACTState of VIRGINIA

§1.3. Service Intensity Index (SII).

- A. The function of a service intensity index is to identify the resource needs of a given facility's patient mix relative to the needs in other nursing homes. If the SII value equals 1.20, it indicates that the patient mix in that facility is 20 percent more resource-intensive than the patient mix in the average Virginia nursing facility.
- B. The SII is used to adjust direct patient care cost ceilings and rates for application to individual nursing facilities. Indirect patient care cost ceilings and rates are not adjusted since these costs are not influenced by patient service needs.
- C. To calculate the service intensity index:
1. Develop a relative resource costs for patient classes.
 - a. Average daily nursing resource costs per day for patients in each patient class were determined by using data obtained from (i) the Commonwealth's Long-Term Care Information System (LTCIS) identifying estimates of service needs, (ii) data from a 1987 Maryland time and motion study to derive nursing time requirements for each service, and (iii) KPGM Peat Marwick Survey of Virginia Long-term Care NF's Nursing wages to determine the resource indexes for each patient class.
 - b. The average daily nursing costs per day for patients (see a. above) were divided by a State average daily nursing resource cost to obtain a relative cost index.
 - c. Patients were grouped in three classes and the average relative cost by class is as follows:
 - Class A - Routine I: .67
 - Class B - Routine II: 1.09
 - Class C - Heavy Care: 1.64

The cost for caring for a Class A patient is on the average equal to 67% of the daily nursing costs for the average Virginia nursing facility patient. Class B and C patients are respectively 9% and 64% more costly to treat in terms of nursing resources than the average nursing facility patient.

TN No. 90-08
Supersedes
TN No. N/A

Approval Date 10-19-90

Effective Date 10-01-90

STATE PLAN UNDER TITLE XIX OF THE SOCIAL SECURITY ACT

State of VIRGINIA

These resource cost values will remain the same until a new time and motion study conducted.

2. Develop an average relative resource cost of all patients in a facility. The result is called a Facility Score.
 - a. The number of patients in each class within a facility is multiplied by the relative resource cost value of that class.
 - b. These amounts are totaled and divided by the number of patients in a facility. For example:

Facility 1:

40 Class A patients x	.67 =	26.8
40 Class B patients x	1.09 =	43.6
20 Class C patients x	1.64 =	32.8
100 Patients		103.2
Divided by number of Patients		100.0
Facility Score		1.03

The Facility Score for Facility 1 is 1.03.

3. Finally, the service intensity index for a facility is calculated by standardizing the average resource cost measure, across nursing facilities. The resource values up to this point are standardized or normalized across Virginia nursing facility patients but not across Virginia nursing facilities. To accomplish this step, the mean for the relative resource measure across all Virginia facilities is determined and the facility-specific value is divided by this mean.

For example: If the State's mean relative resource measure was .92 across all Virginia facilities, the Service Intensity Index for Facility 1 identified above would be 1.12, which equals 1.03 divided by .92. The 1.12 value indicates that the patients in Facility 1 are 12% (1.12-1.00) percent more costly to treat than patients in the average Virginia nursing facility.

TN No. 90-08

Approval Date 10-19-90

Effective Date 10-01-90

Supersedes

TN No. N/A

STATE PLAN UNDER TITLE XIX OF THE SOCIAL SECURITY ACT

State of VIRGINIA

4. The Service Intensity Index will be calculated quarterly, and is used to derive the direct patient care cost ceiling and rate components of the facility's payment rate which will be adjusted semi-annually. A semi-annual SII is calculated by averaging appropriate quarterly SII values for the respective reporting period.

§1.4. Following is an illustration of how a NF's Service Intensity Index is used to adjust direct patient care prospective operating ceilings and the semi-annual rate adjustments to the prospective direct patient care operating cost base rate.

A. Assumptions.

1. The NF's fiscal years are December 31, 1991 and December 31, 1992.
2. The average allowable direct patient care operating base rate for December 31, 1991 is \$25.
3. The allowance for inflation is 6% for the fiscal year end beginning January 1, 1992.
4. The NF's peer group ceiling for the fiscal year end beginning January 1, 1992 is \$30.
5. The NF's semi-annual normalized SSIs are as follows:

1991 First Semi-Annual SSI -	.98
1991 Second Semi-Annual SSI -	.99
1992 First Semi-Annual SSI -	1.00

B. Calculation of NF's Direct Patient Care Prospective Ceiling.

1. PIRS adjusted ceiling for the period January 1, 1992 through June 30, 1992:

FYE 1992 Peer Group Ceiling	\$30.00
1991 Second Semi-annual SII	<u>x .99</u>
Facility Ceiling	<u>\$29.70</u>

2. PIRS adjusted ceiling for the period July 1, 1992 through December 31, 1992:

FYE 1992 Peer Group Ceiling	\$30.00
1992 First Semi-annual SII	<u>x 1.00</u>
Facility Ceiling	<u>\$30.00</u>

TN No. 90-08
 Supersedes
 TN No. N/A

Approval Date 10-19-90Effective Date 10-01-90

STATE PLAN UNDER TITLE XIX OF THE SOCIAL SECURITY ACT

State of VIRGINIA

C. Calculation of NF's Prospective Direct Patient Care Operating Cost Rate.

1. Prospective Direct Patient Care Operating Cost Base Rate:

FYE 1991 Average Allowable Direct Patient Care	
Operating Base Rate	\$25.00
Allowance For Inflation - FYE 1992	x 1.06
	<u>\$26.50</u>

2. Calculation of FYE 1991 Average SII:

First Semi-annual Period SII	.98
Second Semi-annual Period SII	.99
Average FYE 1991 SII	.985

3. Calculation of FYE 1992 SII Rate Adjustments:

a. Rate adjustment for the period January 1, 1992 through June 30, 1992:

1991 Second Semi-annual SII	.99
1991 Average SII (From C.2.)	.985
Calculation:	.99 / .985
Rate Adjustment Factor	= 1.0051
Prospective Direct Patient Care	
Operating Cost Base Rate (From C.1.)	\$26.50
Calculation:	\$26.50 x 1.0051
Prospective Direct Patient Care	
Operating Cost Rate	<u>\$26.64</u>

b. Rate adjustment for the period July 1, 1992 through December 31, 1992:

1999 First Semi-annual SII	1.000
1991 Average SII (From C.2.)	.985
Calculation:	1.00 / .985
Rate Adjustment Factor	1.0152
Prospective Direct Patient Care	
Operating Cost Base Rate (From C.1.)	\$26.50
Calculation:	\$26.50 x 1.0152
Prospective Direct Patient Care	
Operating Cost Rate	<u>\$26.90</u>

TN No. 90-08Approval Date 10-19-90Effective Date 10-01-90

Supersedes

TN No. N/A

STATE PLAN UNDER TITLE XIX OF THE SOCIAL SECURITY ACT

State of VIRGINIA

D. In this illustration the NF's PIRS Direct Patient Care Operating Reimbursement Rate for FYE 1992 would be as follows:

1. For the period January 1, 1992 through June 30, 1992 the reimbursement rate would be \$26.64 since the rate is lower than the NF's PIRS adjusted ceiling of \$29.70 (From B.1.).
2. For the period July 1, 1992 through December 31, 1992 the reimbursement rate would be \$26.90 since the rate is lower than the NF's PIRS adjusted ceiling of \$30.00 (From B.2.).

§1.5. The methodology for applying the allowance for inflation to the NF's base "current" operating rate during the phase-in period as outlined in §2.8 (12 VAC 30-90-40) of the Nursing Home Payment System is as follows:

- A. In the following methodology, 1st Q is defined as the first calendar quarter, 2nd Q as the second calendar quarter, 3rd Q is defined as the third calendar quarter, and 4th Q is defined as the fourth calendar quarter.
- B. NF's with fiscal years ending in the 4th quarter of 1990 shall have, in effect from October 1, 1990 through the end of the provider's 1990 fiscal year, as the base "current" operating rate, the rate calculated by DMAS to be effective September 30, 1990.

The base "current" operating rate shall be adjusted for 100% of the historical inflation from the 2nd Q of 1990 through the 4th Q of 1990 and 50% of the forecasted inflation from the 4th Q of 1990 through the 4th Q of 1991, to determine the prospective "current" operating rate for the provider's 1991 FY.

The base "current" operating rate shall be adjusted for 100% of the historical inflation from the 2nd Q of 1990 through the 4th Q of 1991 and 50% of the forecasted inflation from the 4th Q of 1991 through the 4th Q of 1992, to determine the prospective "current" operating rate from the beginning of the provider's subsequent fiscal year end to June 30, 1992.

- C. NF's with fiscal years ending in the 1st Q of 1991 shall have, in effect from October 1, 1990 through the end of the provider's 1991 fiscal year, as the base "current" operating rate, the rate calculated by DMAS to be effective September 30, 1990.

The base "current" operating rate shall be adjusted for 100% of the historical inflation from the 3rd Q of 1990 through the 1st Q of 1991 and 50% of the forecasted inflation from the 1st

TN No. 97-21

Approval Date NOV 3 1990

Effective Date 12-01-97

Supersedes

TN No. 90-08

STATE PLAN UNDER TITLE XIX OF THE SOCIAL SECURITY ACT

State of VIRGINIA

Q of 1991 through the 1st Q of 1992, to determine the prospective "current" operating rate for the provider's 1992 FY.

The base "current" operating rate shall be adjusted for 100% of the historical inflation from the 3rd Q of 1990 through the 1st Q of 1992 and 50% of the forecasted inflation from the 1st Q of 1992 through the 1st Q of 1993, to determine the prospective "current" operating rate from the beginning of the provider's subsequent fiscal year end to June 30, 1992.

- D. NF's with fiscal years ending in the 2nd Q of 1991 shall have, in effect from October 1, 1990 through the end of the Provider's 1991 fiscal year, as the base "current" operating rate, the rate calculated by DMAS to be effective September 30, 1990.

The base "current" operating rate shall be adjusted for 100% of the historical inflation from the 4th Q of 1990 through the 2nd Q of 1991 and 50% of the forecasted inflation from the 2nd Q of 1991 through the 2nd Q of 1992, to determine the prospective "current" operating rate for the provider's 1992 FY or until June 30, 1992 whichever is later.

- E. NF's with fiscal years ending in the 3rd Q of 1990 shall have as the base "current" operating rate, the rate calculated by DMAS to be effective September 30, 1990.

The base "current" operating rate shall be adjusted for 100% of the historical inflation from the 1st Q of 1990 through the 3rd Q of 1990 and 50% of the forecasted inflation from the 3rd Q of 1990 through the 3rd Q of 1991, to determine the prospective "current" operating rate from October 1, 1990 to the end of the provider's 1991 FY.

The base "current" operating rate shall be adjusted for 100% of the historical inflation from the 1st Q of 1990 through the 3rd Q of 1991 and 50% of the forecasted inflation from the 3rd Q of 1991 through the 3rd Q of 1992, to determine the prospective "current" operating rate from the beginning of the provider's subsequent fiscal year end to June 30, 1992.

§1.6. Definition of terms.

ADL	Activities of Daily Living.
ADL Score	A score constructed by the Virginia Center on Aging of the Medical College of Virginia as a composite measure of patient function in six different ADL areas: bathing, dressing, transferring, ambulation, eating, and continency. A zero score indicates that a patient needs no staff assistance in an ADL area. A score of three indicates the patient requires total assistance in an ADL area. The ADL scores range in

TN No. 97-21
Supersedes
TN No. 90-08

Approval Date NOV 6 1998

Effective Date 12-01-97

STATE PLAN UNDER TITLE XIX OF THE SOCIAL SECURITY ACT

State of VIRGINIA

	value from 0 to 12. Low scores indicate fewer ADL deficiencies and high score indicate more extensive deficits.
DMAS 95	The multidimensional assessment document that is completed by each nursing facility at admission, and semi-annually thereafter, on all of its Medicaid residents. The DMAS 95 assessment data is used to document patient characteristics and is entered into the LTCIS for PIRS.
Facility Score	An average resource cost measure of all patients in a facility.
LTCIS: DMAS' Long-Term Care Information System	This system captures data used to identify functional and medical characteristics that have major impacts on the level of nursing resource utilization.
Nursing Facility (NF)	A Facility, other than an intermediate care facility for the mentally retarded, licensed by the Division of Licensure and Certification, State Department of Health, and certified as meeting the participation regulations.
Patient Intensity Rating System	A patient-based (PIRS) reimbursement system which links a facility's per diem rate to the level of services required by its patient mix.
Service Intensity Index (SII)	A mathematical index used to identify the resource needs of a given facility's patient mix relative to the needs in other nursing homes.

TN No. 97-21
Supersedes
TN No. 90-08

Approval Date NOV 1 1998

Effective Date 12-01-97

STATE PLAN UNDER TITLE XIX OF THE SOCIAL SECURITY ACT

State of VIRGINIA

METHODS AND STANDARDS FOR ESTABLISHING PAYMENT RATES FOR SPECIALIZED CARE

12 VAC 30-90-310. Normalized Case Mix Index (NCMI).

The following is an illustration of how a specialized care provider's Normalized Case Mix Index (NCMI) is used to adjust the prospective routine operating cost base rate and prospective operating ceiling.

A. Assumptions.

1. The NF's fiscal years are December 31, 1996 and December 31, 1997.
2. The average allowable routine nursing labor and non-labor base rate for December 31, 1996 is \$205.
3. The average allowable indirect patient care operating base rate for December 31, 1996 is \$90.
4. The allowance for inflation is 3% for the fiscal year end beginning January 1, 1997.
5. The NF's statewide ceiling for the fiscal year end beginning January 1, 1997 is \$300.
6. The NF's normalized HCFA nursing wage index is 1.0941 for the fiscal year end beginning January 1, 1997.
7. The NF's semi-annual normalized NCMI's are as follows:

1996 First Semi-Annual NCMI	1.2000
1996 Second Semi-Annual NCMI	1.2400
1997 First Semi-Annual NCMI	1.2600

B. Calculation of NF's Operating Ceiling.

1. Period January 1, 1997 through June 30, 1997.

FYE 1997 Statewide ceiling	\$300	
Nursing Labor Component Percentage	x 67.22%	= \$201.66
Normalized Wage Index	x 1.0941	
Adjusted Nursing Labor Ceiling Component		= \$220.64
Nursing Non-Labor Ceiling Component	+ \$ 11.49	
Adjusted Nursing Labor and Non-Labor Ceiling		= \$232.13
FYE 1996 Second Semi-Annual NCMI	x 1.2400	= \$287.84
Indirect Patient Care Ceiling Component	(\$300.00	
	- 201.66	= \$86.85
	- 11.49)	
Total Facility Operating Ceiling	\$287.84	
	+ \$86.85	= \$374.69

STATE PLAN UNDER TITLE XIX OF THE SOCIAL SECURITY ACT

State: VIRGINIA

METHODS AND STANDARDS FOR ESTABLISHING PAYMENT RATES FOR SPECIALIZED CARE

B. Calculation of NF's Operating Ceiling.

1. Period January 1, 1997 through June 30, 1997.

FYE 1997 Statewide ceiling	\$300	
Nursing Labor Component Percentage	x 67.22%	= \$201.66
Normalized Wage Index	x 1.0941	
Adjusted Nursing Labor Ceiling Component		= \$220.64
Nursing Non-Labor Ceiling Component	+ \$ 11.49	
Adjusted Nursing Labor and Non-Labor Ceiling		= \$232.13
FYE 1996 Second Semi-Annual NCMI	x 1.2400	= \$287.84
Indirect Patient Care Ceiling Component	\$300.00	
	- 201.66	
	- 11.49	= \$ 86.85
Total Facility Operating Ceiling	\$287.84	
	+ \$86.85	= \$374.69

2. Period July 1, 1997 through December 31, 1997.

Adjusted Nursing Labor and Non-Labor Ceiling per B.1. above	\$232.13	
FYE 1997 First Semi-Annual NCMI	x 1.2600	= \$292.48
Indirect Patient Care Ceiling Component	+ 86.85	
Total Facility Operating Ceiling		= \$379.33

C. Calculation of NF's Prospective Operating Cost Rate.

1. Prospective Operating Cost Base Rate.

FYE 1996 Nursing Labor and Non-Labor Operating Base Rate	\$205	
Allowance for Inflation - FYE 1997	x 1.03	
Prospective Nursing Labor and Non-Labor Cost Rate		= \$211.15
FYE 1996 Indirect Patient Care Operating Base Rate	\$ 90.00	
Allowance for Inflation - FYE 1997	x 1.03	
Prospective Indirect Patient Care Operating Cost Rate		= \$ 92.70

FN No. 96-15Approval Date 10-30-97Effective Date 12-2-96

Supersedes

FN No. N A